

STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION

ILLINOIS INDEPENDENT TELEPHONE)	
ASSOCIATION)	
)	Docket No. 16-0378
Petition to update the Section 13-301(1)(d) Illinois)	
Universal Service Fund and for other relief.)	

DIRECT TESTIMONY OF
DOUGLAS MEREDITH
ON BEHALF OF
THE ILLINOIS INDEPENDENT TELEPHONE ASSOCIATION

September 7, 2016
Revised September 30, 2016

Table of Contents

I. INTRODUCTION.....	1
II. HISTORICAL BACKGROUND.....	5
REVIEW OF FEDERAL ACTIVITY	11
III. THE IITA AND AT&T STIPULATION.....	12
IV. STATUTORY GUIDANCE.....	19
THE SUPPORTED SERVICES	20
AFFORDABLE RATE FOR SUPPORTED SERVICES.....	22
ECONOMIC COSTS	25
V. ANALYSIS AND SELECTION OF ECONOMIC COST MODEL.....	27
COSTQUEST AND ECONOMIC MODELS.....	27
COSTQUEST MODEL DESCRIPTION AND INPUTS.....	31
ECONOMIC COST STUDY RESULTS	32
VI. DETERMINING LEVEL OF LONG-TERM IUSF SUPPORT.....	39
INSTRUCTIONS AND ADJUSTMENTS.....	40
RESULTS	43
VII. ASSESSMENT AND IMPACT ON IUSF SURCHARGE	46
VIII. FUNDING MECHANISM AND ADMINISTRATION	47
IX. SUMMARY AND CONCLUSION	47

List of Exhibits

IITA Exhibit 1.00 - Revised - Pre-filed Direct Testimony of Douglas Meredith
IITA Exhibit 1.01 - Douglas Meredith Curriculum Vitae
IITA Exhibit 1.02 - Revised - List of IITA Members that are Seeking Funding
IITA Exhibit 1.03 - IITA and AT&T Stipulation
IITA Exhibit 1.04 - NRRI 15-05 State USF Report
IITA Exhibit 1.05 - FCC 2016 URS Voice Data Survey
IITA Exhibit 1.06 - CostQuest User Guide for SBCM (Proprietary)
IITA Exhibit 1.07 - CostQuest Model Methodology for SBCM
IITA Exhibit 1.08 - CostQuest Default Inputs (Proprietary)
IITA Exhibit 1.09 - Revised - Economic Cost Data Summary Report (Proprietary)
IITA Exhibit 1.10 - Revised - Economic Cost Data Summary Report with DSL Revenues (Proprietary)
IITA Exhibit 1.11 - Schedule 1.01 Form - Test Company Sample
IITA Exhibit 1.12 - IITA Standard Adjustments Instructions
IITA Exhibit 1.13 - NECA Reporting Guideline 3.1
IITA Exhibit 1.14 - FCC Letter to USAC (2014)
IITA Exhibit 1.15 - Revised - Step-two Rate-of-Return Summary Report
IITA Exhibit 1.16 - Revised - IITA Requested Long-Term IUSF Amounts by Carrier

I. Introduction

Q: Please state your full name, address, place of employment and position with your employer.

A: My full name is Douglas Duncan Meredith. I am employed by John Staurulakis, Inc. ("JSI") as Director – Economics and Policy. My office is located at 547 Oakview Lane, Bountiful, Utah 84010.

Q: What is JSI and what does it do?

A: JSI is a telecommunications consulting firm headquartered in Greenbelt, Maryland. JSI has provided telecommunications consulting services to local exchange carriers since 1963.

Q: Please describe your professional experience and educational background prior to coming to work for JSI.

A: Prior to my work at JSI, I was an independent research economist in the District of Columbia and a graduate student at the University of Maryland – College Park. I have a Bachelor of Arts degree in economics from the University of Utah, and a Masters degree in Economics from the University of Maryland – College Park. While attending the University of Maryland – College Park, I was also a Ph.D. candidate in Economics, having completed all coursework, comprehensive and field examinations for a Doctorate of Economics.

20 **Q: Please describe your duties and responsibilities with JSI.**

21 A: As the Director of Economics and Policy at JSI, I assist clients with the development of
22 policy pertaining to economics, pricing and regulatory affairs. I have been employed by
23 JSI since 1995.

24 In my employment at JSI, I have participated in numerous proceedings for rural and
25 non-rural telephone companies. These activities include, but are not limited to, the
26 creation of forward-looking economic cost studies, the development of policy related to
27 the application of the rural safeguards for qualified local exchange carriers, the
28 determination of Eligible Telecommunications Carriers, the sustainability and application
29 of universal service policy for telecommunication carriers, as well as supporting
30 incumbent local exchange carriers in arbitration proceedings and rural exemption and
31 suspension and/or modification proceedings.

32 In addition to assisting telecommunications carrier clients, I have served as the economic
33 advisor for the Telecommunications Regulatory Board of Puerto Rico ("Puerto Rico
34 Board of Commissioners") since 1997. In this capacity, I provide economic and policy
35 advice to the Puerto Rico Board of Commissioners on all telecommunications issues that
36 have either a financial or economic impact on carriers or end-users. I have participated in
37 a number of arbitration panels established by the Puerto Rico Board of Commissioners to
38 arbitrate interconnection issues under Section 252 of the Telecommunications Act of
39 1996.

40 I have participated in numerous national incumbent local exchange carrier and
41 telecommunications groups, including those headed by NTCA, OPASTCO, USTelecom,

and the Rural Policy Research Institute. My participation in these groups focuses on the development of policy recommendations for advancing universal service and telecommunications capabilities in rural communities and other policy matters.

Q: Have you testified previously in federal and state regulatory proceedings on telecommunications issues?

A: Yes. I have testified live or in pre-filed regulatory testimony in various states including Maine, Vermont, New Hampshire, New York, Michigan, Wisconsin, North Dakota, South Dakota, Texas, South Carolina, Tennessee, Colorado, Kentucky, and Utah. I have also assisted clients in regulatory proceedings in many other states that did not require formal testimony, including Florida, Louisiana, Mississippi, Puerto Rico and Virginia. In addition to participation in state regulatory proceedings, I have assisted clients in federal regulatory proceedings in the filing of formal comments in various proceedings and submission of economic reports in an enforcement proceeding.

Q: Do you have a resume or curriculum vitae that describes your education and work experience, and identifies the proceedings in which you have provided testimony or otherwise assisted?

A: Yes. It is identified as IITA Exhibit 1.01.

Q: On whose behalf are you testifying in this proceeding?

A: I am submitting testimony for the Illinois Independent Telephone Association ("IITA") and its member companies that are seeking funding. See IITA Exhibit 1.02. The analysis I will be presenting in this testimony will be primarily for these eligible small incumbent rate-of-return Illinois telephone companies. Each of the participating carriers meets the

State of Illinois USF ("IUSF") eligibility criteria. I note that there are three participating carriers are not members of the IITA. These carriers are: Geneseo Telephone Co., Cambridge Telephone Co – IL, and Henry County Telephone Co. (hereafter identified as the "Geneseo Companies")

Q: What is the purpose of your testimony?

A: I present a Stipulation between IITA and AT&T proposing to update IUSF disbursements for eligible small incumbent rate-of-return carriers under the provisions of Section 13-301(1)(d) of the Public Utilities Act ("PUA"). My testimony includes the following sections:

- (1) a brief historical background of the IUSF;
- (2) a review of the IITA/AT&T Stipulation;
- (3) a review of the relevant statutory guidance that informs this proceeding;
- (4) a discussion of the analysis and selection of the economic cost study used in this proceeding;
- (5) a presentation of the IUSF support amounts proposed by IITA;
- (6) an assessment of the impact on the IUSF surcharge; and finally
- (7) a brief description of the funding mechanism and administration of the IUSF.

I have numerous IITA Exhibits that support and provide additional information related to the IITA proposal that are identified in the List of Exhibits.

I note that other witnesses representing the individual companies who seek Long-Term IUSF support will provide specific information regarding individual company calculations.

86 **Q: You mention above (and IITA attached to its Petition) a Stipulation and Agreement**
87 **entered into by IITA and by AT&T. Can you explain what that is?**

88 A: That Stipulation and Agreement (“Stipulation”) is central to IITA’s Petition. As IITA did
89 for the Interim IUSF proceeding, in conjunction with the work being done in the
90 Commission Staff sponsored workshops, IITA pursued an agreement with AT&T that
91 would update the IUSF in a way that would serve the public interest. IITA negotiated the
92 Stipulation with AT&T because AT&T has been a significant participant in prior IUSF
93 proceedings and is a major funding carrier to the IUSF. As such, IITA believed that AT&T
94 would be a valuable partner in crafting a Stipulation that would advance the development
95 of the Long-Term IUSF program in a manner that best served the public interest. I will
96 discuss the Stipulation at greater length in Section III of my testimony.

97 **II. Historical Background**

98 **Q: Please review the past actions of the Commission that have led to IITA filing its**
99 **Petition.**

100 A: Since Docket No. 83-0142 implemented the Illinois public policy to provide support to
101 eligible small incumbent rate-of-return carriers, the Commission has marshalled state
102 resources to ensure that “telephone service remains affordable in high costs areas,” with the
103 assurance that any assistance provided is “correctly based on costs” and with the
104 recognition that “small companies need more high cost assistance than larger companies
105 because small companies have less flexibility than larger companies to recover above
106 average costs without an adverse impact on residence and single line business subscribers.”

(See Twenty-Seventh Interim Order: High Cost Fund, Docket 83-0142, October 16, 1986, “27th Interim Order”)

For nearly 15 years under the current statute the Commission has provided critical state-based support to eligible small incumbent rate-of-return local exchange carriers in Illinois. In its current form the USF fund was established in 2001 (Docket Nos. 00-0233 and 00-0335 consolidated) and has undergone a series of reviews and updates. In 2011 IITA requested an interim update to the IUSF to “increase the size of the fund consistent with changes in circumstances since the initial fund was established.” (Dockets Nos. 11-0210 and 11-0211 consolidated) In 2013, the Commission adopted an interim update to the IUSF calculations (this update is identified hereinafter as the “Interim IUSF”).

After 2013, work began on a “Long-Term” IUSF platform that was intended to replace the Interim IUSF calculations. This Long-Term IUSF was to conform to Section 13-301 of the PUA, be consistent with the Commission’s expressed wishes, and remain consistent with FCC policies and regulations. The 2013 Order established a timeline to develop this Long-Term IUSF that was to be based on “a different methodology, absent a showing that no such alternative methodology is reasonably feasible.”

IITA actively participated in a series of workshops conducted by Commission Staff and attended by interested parties. After undertaking an extensive survey and a review of available economic cost models in the public domain and a canvass of other states’ universal service programs, IITA recommended to the workshop participants that the Commission retain its two-step methodology for IUSF distribution because, while other states have differing approaches to universal service support, none have the specific

129 statutory requirements found in the Illinois PUA. After extensive discussion in the
130 workshops, no other workshop participant presented an alternative methodology. Thus,
131 Commission Staff and workshop participants recommended the Commission authorize the
132 payment for licensing an economic cost model developed by CostQuest Associates
133 (“CostQuest”). IITA fully supported this licensing and, consistent with the Stipulation
134 discussed below, recommends the Commission determine that the use of the CostQuest
135 model with its default inputs satisfies the forward-looking “economic cost” requirement in
136 the statute. Furthermore, consistent with the Stipulation, IITA recommends the
137 Commission retain its two-step methodology, described below, to disburse IUSF support
138 while keeping the overall amount of Long-Term IUSF at a manageable level. IITA
139 advocates that the Commission approve the IITA/AT&T Stipulation in its entirety which
140 updates the Commission’s two-step process (and adds a control adjustment to the second-
141 step) as the best way to determine overall IUSF disbursements that achieves the objectives
142 of the IUSF.

143 **Q: What methodology does the current Interim IUSF use to determine the fixed amount**
144 **of support for participating carriers?**

145 A: The Interim IUSF is based on a two-step methodology. The first step used a forward-
146 looking economic cost model to determine the maximum amount of IUSF distributions on
147 an aggregate basis. The cost model used by the Interim IUSF was the HAI model. After
148 this first step confirmed the need for the IUSF in the aggregate, the Commission looked to
149 participating carrier rate of return or “ROR” Schedule 1.01 forms to determine the amount
150 of support to be disbursed. This two-step methodology was to be examined critically in
151 advance of a petition for a Long-Term IUSF program.

152 **Q: As part of its preparation for a Long-Term IUSF petition and negotiation of the**
153 **Stipulation, did IITA critically examine the two-step process?**

154 A: Yes. Understanding that prior Commission orders determined that using economic cost
155 models satisfies the statutory requirement to examine forward-looking economic costs of
156 carriers, IITA focused on whether using only a forward-looking economic cost model
157 would satisfy the Commission's goals—including the goal to keep the overall amount of
158 high cost support assistance at a manageable level. IITA concluded that the exclusive use
159 of an economic cost model for eligible small incumbent rate-of-return carriers would not
160 achieve the Commission's goals.

161 Since the HAI model was developed in the late 1990s and early 2000s, there has been
162 considerable improvement in the development of forward-looking economic cost models.
163 These second-generation forward-looking models more accurately capture the cost of
164 providing services in specific geographic areas and represent the state-of-art in the
165 modeling community. Regarding models and modeling, I am reminded of the statement of
166 the late statistician George Box who said "all models are wrong but some are useful."
167 (Box, G. E. P., "Robustness in the strategy of scientific model building", in Launer, R. L.;
168 Wilkinson, G. N., Robustness in Statistics, Academic Press, 1979, pp. 201–236.) This very
169 useful guidance informs the Commission that modeling is always going to have limitations
170 but despite perceived shortcomings, a model can still be useful.

171 In recognition of the shortcomings of the HAI model, IITA reviewed extensively the
172 forward-looking model used by the FCC in its federal high cost support program. IITA also
173 examined other forward-looking models available in the industry and reported to the

workshop participants that the CostQuest model was the best available modeling platform for Illinois. The workshop participants concluded that licensing the CostQuest model and using this model as part of the two-step methodology would be a good step forward on the path of establishing a Long-Term IUSF. Separately, IITA and AT&T agreed for purposes of the Stipulation that using the CostQuest model for the first step of the two-step methodology would serve the public interest as part of establishing a Long-Term IUSF. For its part in negotiating the Stipulation that it now advocates in this proceeding, IITA makes the following observations in support of retaining the two-step methodology as explained in the IITA AT&T Stipulation.

First, the CQ modeling is far superior to the HAI modeling. For example, the level of granularity in the CQ model and the use of road right-of-ways in modeling routes is far superior to the HAI method—albeit still not 100 percent correct.

Second, the statute requires that a showing of “economic cost” be made. In prior dockets, the Commission has interpreted this to require some type of forward-looking model to satisfy this criterion. IITA proposes to use the best available forward-looking economic cost model to determine the forward-looking cost in this proceeding.

Third, the forward-looking model reports that loop costs alone show an IUSF need that exceeds the rate-of-return approach using 2015 Schedule 1.01 reports. Continued use of the forward-looking model to confirm the need for a fund combined with the rate-of-return second step to cap the return of individual recipients remains consistent with the Commission’s responsibilities to assure that the rates of the participating carriers are just and reasonable and that overall IUSF support is kept at a manageable level.

196 Fourth, IITA has examined the issues and concerns related to broadband service and the
197 joint use of loop facilities for both voice and broadband services. In the workshops, IITA
198 explained that the IITA member companies offer broadband transmission service as an
199 interstate regulated service. As was discussed in the earlier Interim IUSF proceeding, I
200 emphasize the rate-of-return second-step process includes not only regulated broadband
201 transmission service costs, but also offsetting regulated broadband transmission service
202 revenues. Thus, the concerns raised by the Commission in prior proceedings that IUSF
203 support may be used inadvertently for non-supported services is addressed fully by the
204 two-step approach.

205 Lastly, the second step of the two-step approach continues to use the accounting practices
206 the IITA member companies follow for non-regulated services. These procedures address
207 the separation of costs associated with non-regulated activities from costs assigned to
208 regulated activities.

209 These considerations, in conjunction with the discussions in the workshops, lead IITA to
210 determine there was no better methodology reasonably available other than the updated
211 two-step methodology to determine the aggregate amount of IUSF disbursement for
212 participating carriers. Additionally, it is noteworthy that over the last three-plus years the
213 Commission Staff has sponsored a series of IUSF workshops that were open to interested
214 parties. The goal of the workshop process was to strive for consensus among the interested
215 parties on the terms of the Long-Term IUSF. During this process no workshop participant
216 introduced any alternative methodology for the construction of the IUSF to the updated
217 Commission two-step methodology. This methodology was originally the result of

extensive litigation involving numerous parties to develop from scratch, and achieve compliance with the PUA, the initial version of the existing fund in Dockets 00-233 and 00-335 consolidated.

Review of Federal Activity

Q: Since the adoption of the Interim IUSF in 2013, what steps has the FCC taken that inform the development of a Long-Term IUSF?

A: Since 2013, the FCC has continued to follow its policy blueprint identified as the 2010 National Broadband Plan (“NBP”). (Connecting America – The National Broadband Plan, Federal Communications Commission, March 16, 2010) The NBP contained recommendations regarding revisions to intercarrier compensation and federal universal service programs. Several NBP recommendations were adopted in 2011 in the FCC’s Transformation Order. (In re: Connect Am. Fund — Transformation Order (Connect America Order), 26 FCC Rcd. 17663 (2011), *aff’d* sub nom. In re: FCC, 753 F.3d 1015 (10th Cir. 2014)) In this Order the FCC “comprehensively reform[ed] and modernize[d] the universal service and intercarrier compensation systems to ensure that robust, affordable voice and broadband service, both fixed and mobile, are available to Americans throughout the nation.” (*Id.* at 1)

In the five years after the Transformation Order, the FCC has reformed federal support for Price-Cap carriers by creating its Connect America Model (“CAM”). Most recently, the FCC has issued an offer to rate-of-return carriers to voluntarily accept its Alternative Connect America Model (“A-CAM”) as a means to encourage the deployment of networks capable of delivering voice telephony and broadband service to end-user customers.

Another development that informs FCC policy in this proceeding is the recent order reforming federal Lifeline support. (In re: the Matter of Lifeline and Link Up Reform and Modernization, WC Docket No. 11-42, Third Report and Order, Further Report and Order and Order on Reconsideration, April 27, 2016, FCC 16-38, “Lifeline Reform Order”) In this order, the FCC amended Section 54.101(a). It retained voice telephony as a supported service in subpart (1) and a new subsection that addresses broadband Internet access service (“BIAS”). The FCC states “we take the important step toward achieving one of the express goals of the program by amending the definition of Lifeline to include broadband Internet access service (BIAS) as a supported service in the Lifeline program.” This guidance is not effective until the Office of Management and Budget approves the change or December 1, 2016, whichever is later. This change in the federal Lifeline program shows that federal universal service policy is moving to support infrastructure that provides the means to offer voice telephony services, as it has in the past, and BIAS to end-user customers.

III. The IITA and AT&T Stipulation

Q: IITA referenced and attached to its Petition a Stipulation and Agreement entered into by IITA and by AT&T. Why did the IITA and AT&T pursue a Stipulation and Agreement before IITA filed its Petition?

A: IITA undertook to negotiate a Stipulation and Agreement (“Stipulation”) with AT&T Illinois as it did for the Interim IUSF proceeding. After the work done in the Commission sponsored workshops, IITA pursued an agreement with AT&T to detail explicitly the IITA /AT&T revised two-step methodology. AT&T has been a significant participant in prior

IUSF proceedings and is a major funding carrier to the IUSF, thus IITA felt its input in crafting a Stipulation would greatly advance the development of the Long-Term IUSF program.

Q: You introduced the IITA/AT&T Stipulation above and the intent of the stipulating parties to reach agreement on a Long-Term IUSF that would meet the Legislature's goal of adequately funding the small incumbent rate-of-return carriers in a manner consistent with the public interest. Does the Stipulation serve any other purpose?

A: Yes. Setting an appropriate IUSF can require significant resources on the part of the recipient carriers, the funding carriers, and the Commission. Through the Staff's workshop process in this docket, the stipulating parties determined that, while there may be competing arguments to pursue adjustments (whether upward or downward) in relevant input factors (described below) like the affordable rate or rate of return, the cost of litigating possible adjustments will easily outstrip the impact of any change. Moreover, because the stipulating parties ultimately agreed to set a fund size that is materially lower than the demonstrated need, litigating small adjustments would be meaningless. Rather than engaging in expensive and protracted litigation, the Stipulation frames the issues for the Commission and presents a reasonable basis for moving from the Interim IUSF to a Long-Term IUSF.

Q: Have you provided a copy of the Stipulation as an exhibit to your testimony?

A: Yes. I have included the Stipulation. It is identified as IITA Exhibit 1.03.

Q: Please describe and highlight the Stipulation.

A: I will summarize the Stipulation here and discuss how it meets certain specific statutory requirements in Section IV below.

The Stipulation consists of a preamble and 25 numbered paragraphs. Paragraphs 1-5 describe some of the statutory requirements, background related to the Interim IUSF, and the Commission directives for any Long-Term IUSF. I have described these directives in the historical background section above.

Paragraph 6 describes the review IITA performed to address the concerns and admonitions of previous Commission orders. A NRRI report on State Universal Service Funds was the primary source used to review funding formats for other states' universal service funds. An updated version of this report is identified as IITA Exhibit 1.04. The review did not identify any alternative processes that we considered superior to the existing two-step approach, using past Commission orders and the PUA as guidance. The results of this research were an integral part of the development of the Stipulation. The Stipulation establishes a Long-Term IUSF that conforms to the particular requirements in the Illinois PUA. IITA and AT&T conclude that the amount of the IUSF should be computed ultimately through the use of Schedule 1.01 reports and adjusted and capped through the use of a fund-size control factor to keep the fund at a manageable size.

Paragraphs 7-8 describes the CostQuest cost module—the same module that was developed for the FCC's A-CAM. The use of the CostQuest cost module is intended to be used solely for the purpose of “determining whether the carriers' economic cost of providing services exceeds the affordable rate for such services.” (Section 13-301(d)(1))

304 The parties agree that the CostQuest model will be used to establish that a need exists for
305 state USF support but will not be used to establish the total IUSF fund size or individual
306 company disbursements.

307 Paragraph 9 identifies the companies that applied for and qualified for Interim IUSF
308 funding.

309 Paragraph 10 describes that eligible small incumbent rate-of-return carriers' disbursements
310 will be based on Schedule 1.01 reports for 2015, as adjusted for allowable 2016
311 adjustments. These data are supported by company-designated witnesses for their
312 individual filings in this proceeding.

313 Paragraph 11 identifies the proposed after-tax cost of capital to be used for eligible
314 disbursements. The stipulated rate is 9.34%.

315 Paragraph 12 identifies the use of \$20.39 as the affordable rate for the purpose of
316 determining IUSF disbursements. This amount is also used by the eligibility provision
317 described in paragraph 17.

318 Paragraph 13 identifies the aggregate Schedule 1.01 amount for eligible small incumbent
319 rate-of-return carriers for 2015. According to this aggregate Schedule 1.01 amount, the
320 Stipulation estimates the IUSF fund size would be in excess of \$28.5M annually. (I have
321 examined the Schedule 1.01 Forms for all participating and all eligible carriers and the
322 total disbursement would exceed \$29.9M.) This amount is less than the CostQuest cost
323 module total that exceeds \$48.4M annually. I will discuss these calculations in detail
324 hereafter.

Paragraphs 14-16 specify that despite the Schedule 1.01 total projected need to be in excess of \$28.5M, the parties agree that the updated Long-Term IUSF should be set at \$25.5M annually and should remain in effect until July 2023. The Stipulation applies a fund-size control factor to reduce the aggregate Schedule 1.01 amount to achieve the stipulated \$25.5M aggregate total. This control factor will be applied to each eligible carrier. Specifically, each eligible carrier's disbursement will first be calculated by individual Schedule 1.01 amounts and then reduced by the control factor.

Paragraph 17 addresses carrier eligibility. The notable specific detail in paragraph 17 involves the need to have the monthly basic local rate set at the higher of the Illinois affordable benchmark of \$20.39 or the national federal affordable benchmark used for the federal HCLS program less any mandatory extended area service charges. There are a few policy exceptions to this requirement that are detailed in the Stipulation. Carriers who do not meet this eligibility requirement shall lose eligibility on a month-by-month basis until their monthly basic local rate conforms with this requirement. This paragraph also contains a new provision that a local exchange carrier eligible to receive IUSF must not be an "Electing Provider" as defined in the PUA.

Paragraph 18 addresses the funding of the Long-Term IUSF. There is no proposed change to the process or procedures that are currently employed.

Paragraphs 19-25 address implementation. Consistent with the implementation of the IUSF since its inception in 2001, the Stipulating parties agree that ISCECA should continue to administer the IUSF. The parties encourage the Commission to approve the terms of the Stipulation in its entirety without delay. Further, the parties agree that there should be no

change to the aggregate IUSF amount until a petition is filed in 2023 and a subsequent order is issued. The purpose of creating the Long-Term IUSF that remains in place through this time period is to provide the small carriers some stability in their funding sources for a significant portion of the ongoing FCC reforms (the FCC reforms are planned for the next ten years), and to also provide stability for funding carriers and their end-user customers.

Q: Does eligibility for Long-Term IUSF differ from what has been used in the Interim IUSF?

A: Yes. There are two new eligibility requirements in the Stipulation. First, the Stipulation contains the provision that a LEC eligible to receive IUSF must not be an “Electing Provider” as defined in the PUA. I discussed this provision earlier. The second new eligibility requirement that requires carriers to set their basic local rate to the higher of \$20.39—the established affordable rate—or the national federal affordable benchmark used for the federal HCLS program, less charges for IUSF and any mandatory EAS. The federal affordable benchmark for the FCC’s HCLS program is currently \$18.00 per month with an planned increase to \$20.00 per month in July 2017. Further increases or decreases occurring after July 2018 will depend upon an annual survey of basic rates in urban centers across the nation. IITA expects that the national benchmark for HCLS will approximate the Commission’s established affordable rate for the foreseeable future.

Furthermore, since the Stipulation has a governor that uses the Access Recovery Charge (“ARC”) Residential Rate Ceiling—currently set at \$30.00 (See 47 CFR 51.915(b)(11)), there is little exposure of greatly exceeding the Commission’s current affordable benchmark. The ARC Residential Rate Ceiling is compared with the Rate Ceiling

Component Charges consisting of “federal end user common line charge and the Access Recovery Charge; the flat rate for residential local service (sometimes known as the “1FR” or “R1” rate), mandatory extended area service charges, and state subscriber line charges; per-line state high cost and/or state access replacement universal service contributions, state E911 charges, and state TRS charges.” (See 47 CFR 51.915(b)(11) The component charges include items not included in the Commission’s affordable benchmark, nor in the FCC’s HCLS program benchmark. Because of these somewhat convoluted computations, IITA doesn’t expect the eligibility requirement to be burdensome.

The Stipulation specifically excludes Electing Providers because Long-Term IUSF should be provided only to small incumbent rate-of-return carriers. Since Electing Providers are not rate-of-return regulated by the Commission, the Schedule 1.01 forms are not applicable.

Q: Does IITA fully support the Stipulation attached to its Petition?

A: Yes. IITA believes that it has reached a reasonable and negotiated compromise with AT&T on a number of issues, including an increase in the size of the IUSF that should provide adequate support for the Long-Term IUSF through its next review in 2023. I strongly encourage the Commission to adopt the Stipulation in its entirety in establishing the Long-Term IUSF program.

IV. Statutory Guidance

Q: While the IITA Petition describes the statutory requirements of the Long-Term IUSF, please provide a brief synopsis of the portions of the statute that guided you in forming your recommendations in your testimony.

A: The Stipulation complies with the PUA. The first area of guidance is found in PUA Section 13-301(1)(d) which states that the Commission shall investigate the necessity of, and if appropriate, establish a universal service fund for those carriers who received funding pursuant to 27th Interim Order in Docket No. 83-0142 or the Commission's Orders in Docket Nos. 97-0621 and 98-0679, consolidated.

The statute further details the Commission's obligations in establishing a universal service fund. After reviewing these provisions, the Commission in the Consolidated Dockets established the basic elements of the IUSF, through the Commission's Second Interim Order, entered September 18, 2001, with the effective date of the fund being October 1, 2001.

This statute and the actions taken by the Commission inform IITA that the establishment and maintenance of the IUSF remains in the public interest and the Long-Term IUSF directed by the Commission is needed to further the goals established by the Legislature of Illinois. In addition to the need to offload non-traffic sensitive charges from traffic sensitive intrastate access rates (the subject of the prior Dockets referenced in the statute) the needs of rural networks have increased the need to replace network facilities and equipment. IITA and AT&T both agree that an increase from the Interim IUSF is necessary and in the public interest.

Q: In establishing a Long-Term IUSF, what statutory issues must the Commission consider?

A: The PUA calls upon the Commission to consider a number of factors I will touch on below, all of which are addressed by the Stipulation.

Forward-Looking Economic Costs

Q: Please explain how the Stipulation satisfies the statutory requirement to use forward-looking economic costs.

A: As I explained above, Commission Orders interpreting PUA Section 13-301(1)(d) determined that using economic cost models satisfies the statutory requirement to examine forward-looking economic costs of carriers. The Stipulation uses the CostQuest model's cost module to identify the forward-looking economic costs associated with networks that are capable of providing the required supported services. Consistent with prior Commission decisions, the stipulating parties specifically agreed that the updated forward-looking cost model results for all participating carriers in aggregate be used solely for the purpose of meeting statutory requirements contained in Section 13-301(1)(d) that addresses the requirement for economic costs. This is step one of the proposed two-step process. The CostQuest cost module is specifically designed to calculate forward-looking economic cost as this term is understood by the industry. The forward-looking economic cost calculation used by the FCC in its federal USF programs—both Price Cap and Rate-of-Return Carrier programs—determines the economic cost of providing a network capable of providing voice telephony and broadband services. The PUA requires the use of economic cost to determine at minimum the need for the IUSF. The CostQuest model and its supplied default inputs is a second-generation forward-looking economic cost model that improves

upon what the Commission accepted as an economic cost model in the Interim USF proceeding. While both the HAI and the CostQuest models satisfy this economic cost requirement, the modeling improvement in the CostQuest cost module easily satisfies the economic cost requirement for the supported services.

The Supported Services

Q: Section 13-301(2)(a) requires the Commission to identify the telecommunications services that should be supported by the IUSF. What are your recommendations in this regard?

A: The statute requires the Commission to include, at a minimum, all the federally supported voice telephony services as services that should similarly be supported by an IUSF. Furthermore, the statute allows the Commission to review existing telecommunications services and rate structures and the needs of Illinois consumers and to add additional telecommunications services beyond the federally supported voice telephony telecommunications services that it believes are appropriate. Consistent with its Order in the Interim Dockets, I recommend that the Commission adopt the FCC current list of supported services.

Q: What supported voice telephony services does the FCC currently identify?

A: 47 CFR 54.101(a) describes the federally supported voice telephony services:

Voice Telephony services shall be supported by federal universal service support mechanisms. Eligible voice telephony services must provide voice grade access to the public switched network or its functional equivalent; minutes of use for local service provided at no additional charge to end users; access to the emergency services provided by local government or other public safety organizations, such as 911 and enhanced 911, to the extent the local government in an eligible carrier's service area has implemented 911 or enhanced 911 systems; and toll limitation services to qualifying low-income consumers as provided in subpart E of this part.

As I discussed earlier, modification to this regulation has recently been adopted for Lifeline support reform to add BIAS as an additional subpart.

Q: Do you recommend the Commission add any additional services to the required federally supported voice telephony services?

A: No.

Affordable Rate for Supported Services

Q: How does the Stipulation address the basic affordable rate?

A: In the Commission's Second Interim Order on Rehearing in Docket Nos. 00-0233 and 00-335, consolidated the Commission determined \$20.39 per month to be the affordable rate for the purpose of making any and all determinations connected with the basic elements of the initial IUSF size and individual company qualifying amounts, consistent with the requirements of Section 13-301(1)(d) and 13-301(2)(c). Under the terms of the Stipulation, the stipulating parties recommended that the affordable rate level for the updated IUSF fund continue to be \$20.39 per month.

Q: Why does IITA recommend the Commission retain this affordable rate for voice service?

A: IITA still believes this rate is an affordable rate (albeit at the high end of reasonable for voice service in Illinois). The Stipulation used this rate to determine whether the economic cost of providing service justified the support of the Long-Term IUSF.

Although IITA believes there are indications the affordable rate should be lowered and others have suggested it could be raised, the stipulating parties agreed that \$20.39

continues to be a reasonable compromise determination for an affordable rate for Illinois consumers and the stipulating parties have relied on that affordable rate for the purpose of making any and all determinations connected with the basic elements of the IUSF fund size and individual company qualifying amounts as described in the Stipulation.

The Stipulation is a compromise between IITA and AT&T and is designed to be adopted in its entirety. The benefit of adopting the Stipulation in its entirety is that it avoids the expense of litigation over details that ultimately have no impact on the stipulated overall size of the Long-Term IUSF.

Q: How was this rate established?

A: I understand that the Commission used the combined flat-rate and average monthly usage charges for rural customers residing in one Census Tract in a Frontier Illinois (formerly Verizon) exchange.

Q: Have you reviewed information that suggests this rate is still appropriate?

A: Yes. The FCC gathers urban data across the nation each year. Frontier Illinois participated in the 2016 survey for one exchange for unlimited-flat-rated circuit switched service. Frontier reported \$18.99 for its basic residential rate. This rate, compared with the Commission's basic affordable rate of \$20.39, shows that for the available 2016 data from the FCC, the Commission's basic affordable rate remains reasonable. (See IITA Exhibit 1.05 - 2016 URS Voice Data)

Q: Does the FCC survey contain data for other Illinois ILECs?

A: Yes. In addition to the Frontier Census Tract data, the survey contains data for eight AT&T Census Tracts, and one Henry County Census Tract. The average unlimited-flat-rated circuit switched service rate for all Illinois ILECs is \$14.60 with a standard deviation of approximately \$2.30.

Q: How does the Commission's rate of \$20.39 compare with the FCC's national average for ILEC unlimited or flat-rate local service?

A: The FCC data show the average for unlimited or flat-rate local service in urban areas to be \$21.28 with a standard deviation of approximately \$3.90. (This value does not include state subscriber line, state USF, or any mandatory EAS charges). The Commission's rate is currently \$0.89 less than the national average, or less than one-quarter of a standard deviation of the sample average. This survey is only for urban Census tracts and consequently does not include Census tracts where smaller rural carriers operate. The Commission's rate is very close to the FCC's urban sample average for ILEC's unlimited or flat-rate local service.

Q: Based on the most recent FCC urban rate survey does the Commission's affordable rate appear reasonable?

A: Yes. The Commission's rate of \$20.39 is higher than the urban Illinois rate for reporting Illinois ILECs and is reasonably comparable to the national ILEC average. IITA recommends, as called for by the Stipulation, the continued use its \$20.39 affordable rate.

Rate of Return

Q: The Stipulation uses an after-tax overall rate of return or cost of capital of 9.34% whereas the FCC's most recent review of rate of return for small carriers set a rate of 9.75%. Isn't this lower rate a significant compromise by IITA?

A: Yes. In the interest of achieving a workable Stipulation, IITA agreed to this 9.34% after-tax cost of capital as a compromise by the IITA. The Commission accepted this rate as a reasonable after-tax cost of capital in 2013. This rate is lower than 9.75% which the FCC determined in 2016 was a reasonable weighted average cost of capital for interstate purposes. Use of this stipulated rate represents a compromise by IITA members and AT&T to achieve a Stipulation. The Stipulation used the rate used in the Interim IUSF proceeding to avoid re-litigating the issue, particularly in light of the larger agreement to set a specific fund size. This rate does not reflect what the IITA or its members consider to be an adequate rate of return at this time.

Economic Costs

Q: How does IITA propose to show that the economic cost of the supported services is greater than the affordable rate and other federal revenues?

A: The Stipulation addresses the economic cost of service. IITA proposes to use the CostQuest cost module to identify the economic costs of the supported voice telephony services. These costs are compared with the revenues derived from the affordable rate and other federal revenues for the supported services. The Stipulation states that the forward-looking economic cost estimate for all participating ILECs in the aggregate shall be used solely for the purposes of meeting the requirement in the statute that identifies economic cost—and permits the use of proxy values for this purpose. The Stipulation states that the CostQuest

model is not to be used to establish the total Long-Term IUSF nor to determine any individual company qualifying amounts.

Q: Does the CostQuest model, using default inputs, confirm that the economic costs are greater than the revenue generated from an affordable rate as required in the statute?

A: Yes. I will describe the details below. The important point, however, is that the aggregate economic cost less the aggregate affordable rate revenues and federal high cost support greatly exceeds the Stipulated fund amount of \$25.5M annually.

Q: How should the Commission determine economic cost?

A: Section 13-301(1)(d) states “In establishing any such universal service support fund, the Commission shall, in addition to the determination of costs for supported services, consider and make findings pursuant to subsection (2) of this Section. Proxy cost, as determined by the Commission, may be used for this purpose.” Thus, the use of proxy cost, or more specifically, the development of economic cost using proxy input values—as is done with the CostQuest model—is both permissible and consistent with prior Commission actions. Since “all models are bad, but some are useful,” it is important to understand that the CostQuest model is useful only in the context of aggregated results. Forward-looking economic cost models are useful to determine aggregate needs across a broad population base. Forward-looking economic cost models begin to break down when individual company results are examined since the law of averages that tends to smooth out discrepancies breaks down. Said another way, in the aggregate, the pluses and minuses will tend to cancel each other out; however, when looking at individual small company results, the hazard is that one may be looking at model results that do not reflect accurately the

economic cost at that level of granularity. Thus, an analysis based on the group of companies seeking to participate in the Long-Term Fund (“participating ILECs”), IITA believes, is within the scope of the statute regarding proxy cost studies. Furthermore, because of the deficiencies in modeling, IITA suggests that, according to the Stipulation, using the forward-looking model in the aggregate is not only within the scope of the statute but a more appropriate measure of the statutory tests than are the individual company results.

Q: Is the IITA approach consistent with prior Commission decisions?

A: Yes. IITA updates the prior methodology and proposes to use a more advanced model to determine the economic cost of providing the supported services. IITA continues to use the two-step IUSF methodology adopted by the Commission in for Interim IUSF disbursements.

V. Analysis and Selection of Economic Cost Model

Q: Please provide any additional analysis you have regarding the choice of the CostQuest model.

A: As I have discussed in earlier Sections of this testimony, the stipulating parties agreed to use the cost model developed by CostQuest that was licensed by the Commission for this proceeding. Below, in further support as to why IITA advocates the use of the CostQuest model as part of the Stipulation, I will provide a more in-depth explanation of the model and how I applied it to develop forward-looking economic costs.

CostQuest and Economic Models

Q: Can you briefly summarize the reason why you propose to develop the economic costs presented in this proceeding using the CostQuest model?

A: Yes. After an extensive review of the forward-looking cost models available for use and that have a public record pedigree, IITA strongly recommends that the CostQuest model with its accompanying default inputs be selected by the Commission for use in this proceeding. Other publicly available forward-looking cost models, such as the HAI and the HCPM used by the FCC have been superseded largely by CostQuest's model development. CostQuest's modeling represents the state-of-the-art of forward-looking economic cost modeling and its cost model with default inputs should be adopted by the Commission.

Q: Why was the CostQuest model developed?

A: The model the Commission licensed uses the same cost module that is used by the FCC in its A-CAM as discussed earlier. The module has been thoroughly vetted by the industry because this cost module was first used by price-cap carriers to distribute federal universal service, then it was offered recently to rate-of-return carriers as an alternative to legacy federal support programs. I observe that rate-of-return carriers have the voluntary option to use the model due in part I believe to the fact that the FCC cannot guarantee the precise accuracy of the model results for individual granular areas, but that in the aggregate, the model satisfies the needs of rural areas as a whole.

Q: Does the CostQuest model include default inputs?

A: Yes. The CostQuest model includes default inputs. The default inputs for the model come from the FCC's input development for price-cap and rate-of-return carriers. The majority

of the default inputs were developed for price-cap carriers and represent prices for infrastructure that large price-cap carriers enjoy due to their scale. Operational cost inputs are derived in part from price-cap carriers with adjustments for rate-of-return carriers using NECA data where available.

Q: Are the default inputs reasonable for this proceeding?

A: Yes. The default inputs for the CostQuest model represent a reasonable set of inputs for this proceeding. It is generally understood that the price-cap inputs used in the model reflect price-cap areas and not rate-of-return areas. If anything, the expectation is that rate-of-return inputs for infrastructure investment would yield a higher economic cost. Notwithstanding, given the purpose of the first-step of the proposed two-step methodology, I suggest it isn't necessary to achieve absolute precision with the inputs since the economic cost for the participating ILECs using default inputs exceeds the affordable rate plus federal high cost recovery for supported services. Thus, it isn't necessary to show even higher economic costs by using only rate-of-return company inputs. If however, others in this proceeding propose to alter the default input set, IITA would respond by recommending Illinois-specific small-carrier inputs.

Q: Do you have concerns about using an economic model if it were to be used exclusively—without the second step that uses Schedule 1.01 data?

A: Yes. The quote by Dr. Box “all models are wrong, but some are useful” is apt for describing forward-looking economic models. Obviously, the use of embedded costs of the participating carriers is preferred when determining disbursements from the IUSF because of their precision. Examining embedded costs allows regulators and intervenors to explore

628 and dispute specific costs that do not meet the requirement to be supported by IUSF
629 support. Economic costs on the other hand are based on algorithms and inputs, neither of
630 which may accurately reflect the reality of providing the supported services. If an
631 economic cost model were to be used exclusively, I would have serious concerns about the
632 default inputs and algorithms. Inputs drive the model results and a very close examination
633 of the inputs would be needed to accurately—as best as a model can achieve—reflect the
634 economic cost of the participating ILECs. The Stipulation avoids this concern by its use of
635 the CostQuest model in step one of its proposed methodology. Even with the best modeling
636 technique available in the CostQuest model, the rural industry generally has challenged the
637 results of the A-CAM cost module. (*See Vantage Point*, January 5, 2016 *ex parte* letter to
638 FCC, WC Docket No. 10-90) These concerns are avoided by the Stipulation’s two-step
639 methodology. And lastly, as I have described earlier, models can be useful at one level of
640 analysis but not useful at another level of analysis. Said another way, some models may be
641 useful in the aggregate but not useful when used for specific applications, such as
642 identifying IUSF disbursement for an individual carrier. These concerns are not exhaustive
643 and they certainly are not new. Many parties have expressed these concerns to the FCC
644 during the FCC’s decade-plus examination of forward-looking economic cost models for
645 federal high cost support. From a federal viewpoint, the FCC does not require the use of a
646 forward-looking economic cost model for rate-of-return carriers—perhaps in part due to
647 these serious concerns raised by the industry. Instead the FCC uses its model for electing
648 rate-of-return carriers with a backstop methodology that continues to use embedded costs.
649 The Stipulation methodology also uses an economic cost model when necessary but then

sets it aside when more accurate embedded costs are available for specific IUSF disbursement.

Q: Given these concerns you have expressed, do you still support the economic costs that you have developed?

A: Yes. Given the statutory requirements in Illinois and the CostQuest model that can be used to develop aggregate cost results, I believe the costs developed are adequate representations of the aggregate economic cost for meeting the statutory requirement. However, I specifically have concerns about giving too much reliance to individual company results when those results reflect a single exchange or only a few exchanges. I recommend the Commission use the results of the CostQuest model for the participating carriers as a whole. The Commission may exercise the “proxy” reference in the statute in making its determination whether the statutory requirements regarding economic costs are being met.

CostQuest Model Description and Inputs

Q: Is there documentation describing the CostQuest model and its methodology?

A: Yes. The “Cost to Serve Module” in the CostQuest model licensed by the Commission has a set of detailed procedures. It takes inputs that are both geographic and non-geographic, applies algorithms to these inputs with the goal of producing an estimate of the cost of providing telecommunications-capable networks. IITA Exhibits 1.06 (Proprietary) and 1.07 are the User’s Guide and Model Methodology documents, respectively, produced by CostQuest that explain the model and provided an excellent detailed description of the CostQuest model.

Q: What are the default inputs used by the CostQuest Model?

A: There are twelve Excel workbooks containing scores of worksheets that constitute the CostQuest input collection. These inputs worksheets are presented as IITA Exhibit 1.08 (Proprietary) - CostQuest Inputs. The worksheets include but are not limited to the identification of the infrastructure pricing for capital expenditures, operational expenditures directly attributed to specific network functions, overhead or carrying charge factors such as taxes, and the cost of capital. The Stipulation uses default CostQuest input collection without any changes in order to satisfy the statutory requirement that examines economic costs. The Stipulation also uses these economic cost results in the aggregate—in the same manner aggregate economic costs were used when establishing the Interim IUSF.

Economic Cost Study Results

Q: Do you have results for each of the participating ILECs in Illinois?

A: Yes. I have completed and compiled the results of the economic cost studies for the participating ILECs who are small incumbent rate-of-return carriers. IITA Exhibit 1.09 (Proprietary) shows the results of the economic cost studies using the CostQuest model with default inputs for small incumbent rate-of-return carriers. (For purposes of IITA Exhibit 1.09 (Proprietary), *et seq.*, I have also listed small incumbent rate-of-return local exchange carriers that are not IITA members.)

Q: Please describe the data you present in IITA Exhibit 1.09.

A: IITA Exhibit 1.09 (Proprietary) consists of one page with columns A-K and rows for the participating small incumbent rate-of-return local exchange carriers ILEC in Illinois.

Q: Do columns A and B on IITA Exhibit 1.09 (Proprietary) identify each ILEC?

A: Yes. There is a row for each ILEC and columns A and B identify the Study Area Code (SAC) and the company name.

Q: Please describe the data reported in column C.

A: Column C reports the CostQuest monthly cost per access line for each carrier. These data are produced by CostQuest in a Census Block Group detail report. The report is listed in the CostQuest website portal in the “Posted Data Sets” section as “SSICCC20160226V1acf975_CBGDetail.” I rolled-up the data for each Census Block into the identified SAC and reported the monthly total cost for residential and total cost for business by adding the reported totals together. This amount is then divided by year-end 2015 access lines reported by each company.

Q: Please describe the data reported in column D.

A: Column D is similar to column C except that column D reports the CostQuest monthly loop cost per access line for each carrier. CostQuest classifies or groups investment into nodes. Nodes 2, 3 and 4 include loop investment. Node 0 includes switching and transmission and middle mile investment. Loop cost is a portion of the total monthly cost. This can be seen by comparing column C with column D with the totals in column C greater than column D. I use loop cost as a conservative estimate of overall economic cost for providing the supported voice telephony services. Thus, I only use the loop investment calculated by CostQuest for Nodes 2, 3, and 4. To calculate a loop cost for each carrier, I estimate a monthly carrying charge factor (“MCF”) by dividing the reported total monthly cost by the reported total investment. I then calculate the product of the MCF and the total

loop investment—data from Nodes 2, 3, and 4. This yields an estimate of monthly economic cost for the loop. I expect this economic cost for the loop to be lower than the overall economic cost for providing the supported services; however, this conservative approach still yields an aggregate economic cost higher than the Stipulated \$25.5M so further analysis wouldn't alter the IITA recommendation to the Commission and isn't required.

Q: Does column E report the proposed affordable monthly rate of \$20.39?

A: Yes. Column E reports the Commission's monthly affordable rate of \$20.39 per access line.

Q: Please describe what data is reported in column F and G.

A: Column F calculates the economic loop cost in excess of the affordable monthly rate for each carrier—column D minus column E. Column G reports the year-end 2015 access lines for each carrier.

Q: Is column H where IITA Exhibit 1.09 (Proprietary) reports the potential annual IUSF support? Please explain how this amount is calculated.

A: Yes. The potential annual support is calculated by taking the product of column F and Column G for each carrier. This represents the economic loop cost in excess of the affordable rate multiplied by the total number of access lines for each carrier. This amount is annualized by multiplying by 12. For the remaining columns of the exhibit, I report annual amounts.

Q: Now, I see that to derive an IUSF eligibility amount you subtract some additional revenues from this potential annual support reported in column H. What revenues are subtracted and how are they calculated?

A: Yes. After the potential annual support amount is calculated and reported in column H, there are two revenue sources that need to be subtracted from this amount that provide funds to support voice telephony services. First, federal support funds from federal high-cost universal service programs provide revenues for loop cost recovery. These programs include HCLS, Interstate Common Line Support, Safety Net Support (if any), and Safety Valve Support (if any). The Connect America Fund ICC Support is related to switching and transmission cost recovery and is not related to loop cost recovery. I subtract the projected third quarter 2016 federal universal service support for loop cost recovery from the potential support total. The amount I subtract is reported in column I for each carrier listed on IITA Exhibit 1.09 (Proprietary).

The second subtraction related to loop cost recovery is the federal end-user common line charge ("EUCL" or subscriber line charge "SLC"). These data are reported by each carrier on Schedule 1.01, revenues worksheet cell G20. These amounts are revenues collected by carriers to offset some of the loop costs they incur in providing the supported voice telephony services.

Both of these amounts represent additional revenues, beyond the basic affordable rate, for the recovery of regulated loop costs used in providing the supported universal services.

Q: Does IITA Exhibit 1.09 (Proprietary) take into account federal support funds received by the companies?

A: Yes. The federal support funds received by the companies for loop cost recovery are reported in column I of IITA Exhibit 1.09 (Proprietary). This amount is a projection of the expected federal universal service support for loop cost recovery for each carrier.

Q: Does column K report the IUSF eligibility amount for all participating carriers listed in IITA Exhibit 1.09?

A: Yes. The aggregate annual amount for all participating small rate-of-return incumbent carriers is \$48,439,644. This amount represents the annual economic cost in excess of the affordable rate for the supported services and is computed using a conservative approach that includes only loop costs and yet includes the entire monthly revenue amount of \$20.39 for voice service—part of which is used for loop cost recovery and part is used for recovery of other network costs. Some universal service costs are not included in this analysis and this is okay because even using this conservative approach, the \$48.4M aggregate total is sufficient to indicate there is a need for a Long-Term IUSF. This amount is greater than the Stipulation fixed amount for a Long-Term IUSF which is set at \$25.5M.

Q: Are broadband costs and revenues accounted for in the model?

A: There are broadband costs and revenues that are not accounted for in the model and step-one methodology. The structure sharing and route sharing percentages used in the CostQuest model assigns a portion of the total infrastructure investment to the modeled costs and a portion of the total infrastructure is removed from the modeled costs.

Perhaps the following example will show how sharing allocations play an important role in developing costs in the model. Consider the percentage of investments that are attributed to the carrier's model costs are 48% for aerial plant, between 76.25% to 96.25% for buried plant depending on the density of the area, and a similar percentage range for underground plant. For the studied Illinois carriers, approximately 20% of the plant is aerial plant by default. This means for this example that only 48% of the 20% of aerial structure investment appears as a modeled cost and is used to calculate the economic cost of the supported services. The remaining 52% of structure costs are assigned to other entities or services. The sharing assumptions don't stop with structures either. There is sharing between interoffice and middle mile routes as well as assignment of middle mile route costs to broadband. All of these costs are excluded from modeling the supported services. Moreover, I have not accounted for broadband transmission revenues received by carriers in step one of the methodology. I note that these broadband transmission revenues are included in step two of the methodology that uses Schedule 1.01 data therefore, step two compares all costs with all revenues.

Q: Does not including broadband costs and revenues in step one of the IITA methodology alter your recommendation to the Commission?

A: No. The model attempts to calculate the monthly cost for a least-cost most efficient network with a sizable amount of sharing assumptions built into the algorithms. The modeled cost far exceeds the Stipulation limit for a Long-Term IUSF and consequently, adjusting the model to account for accurate sharing assumptions, for example, to model the broadband costs and revenues isn't going to alter the recommendation that the Commission

determine that the economic costs exceed the affordable rate revenues, adopt the Stipulation limit, and distribute Long-Term IUSF based on the filed Schedule 1.01 data.

Q: What analysis supports your conclusion that broadband costs and revenues do not need to be addressed by the Commission in this proceeding?

A: The carriers that reported Schedule 1.01 forms have specifically listed their regulated DSL revenues for the provision of broadband transmission to third parties (including any affiliates). As I have described earlier, BIAS transmission service is a wholesale interstate regulated service and revenues received for this service are already accounted for in the Schedule 1.01 forms. IITA Exhibit 1.10 (Proprietary) shows the exact information as IITA Exhibit 1.09 (Proprietary) with an added revenue source subtraction. I have listed the DSL revenues received for each reporting carrier and have subtracted these DSL revenues (column K) from the potential support amount. Accounting for the DSL loop revenues results in reducing the aggregate IUSF eligibility amount by approximately \$8.0M, but the adjusted aggregate IUSF amount is still in excess of \$40.3M. This analysis does not adjust the default input collection for the CostQuest model whose sharing assumptions should be modified to properly account for the cost of providing broadband—thus, I am being conservative in reaching my conclusion by subtracting the revenues but not adding additional costs to reflect broadband deployment. The IITA recommendation still applies: the Commission determine that the economic costs exceed the affordable rate revenue, adopt the Stipulation limit, and distribute Long-Term IUSF based on the filed Schedule 1.01 data.

VI. Determining Level of Long-Term IUSF Support

Q: You have calculated the second step in the determination of Long-Term IUSF distribution based on an embedded cost or rate-of-return analysis. Please briefly describe why you mention this second step.

A: The Commission has a longstanding policy to make sure IUSF funds should not be disbursed to carriers until some type of showing is made that the carrier is “in need” of receiving such funding. (*See* the November 21, 2000 First Interim Order) Consistent with this directive and consistent with the most recent Interim IUSF distribution, the Stipulation identifies that a second step be adopted to ensure that the carrier disbursement is justified. (*See* paragraphs 13-14 of IITA Exhibit 1.03)

Q: How does the second step operate?

A: Similar to the procedure for the Interim IUSF, participating carriers will present the information and evidence based upon 2015 actual financial results with any known and measurable changes for 2016 they propose to include. The Form and Schedule of Adjustments attached to the Stipulation and presented herein as IITA Exhibit 1.11. This exhibit reflects the appropriate information to be presented by individual carriers in updating the IUSF using 2015 results and a description of adjustments for 2016.

Q: Did IITA prepare Schedule 1.01 forms for the IITA member companies?

A: No. IITA did not prepare this form for any carrier. Each carrier has the responsibility to complete this analysis for itself. Each carrier is filing its respective analysis with supporting direct testimony. That testimony will validate the carrier’s submission. In

839 addition, each carrier will detail the known and measurable adjustments that have been
840 made and will explain these adjustments.

841 **Q: Has each IITA member company supplied IITA with its individual company analysis**
842 **shown in IITA Exhibit 1.11?**

843 A: No. The Schedule 1.01 form will only be filed by carriers requesting support from the
844 Long-Term IUSF (a few of which – the Geneseo companies – are not IITA members). To
845 the extent that a carrier chooses not to request such support for whatever reason, I do not
846 expect that the carrier would file its Schedule 1.01 form.

847 **Instructions and Adjustments**

848 **Q: Did IITA provide a set of instructions for the standard adjustments it expected to see**
849 **on carrier Schedule 1.01 forms?**

850 A: Yes. IITA Exhibit 1.12 is a sheet containing instructions for four standard adjustments.
851 IITA provided those instructions to its members and the Geneseo companies.

852 **Q: Please describe the first adjustment IITA proposed to its member companies.**

853 A: Adjustment #1 only applies to carriers that did not participate in the Interim IUSF
854 proceeding. If any carrier did not participate in the prior preceding, it would need to file an
855 adjustment to reflect the impact of receding its originating access rates to interstate levels.

856 **Q: What does the second adjustment require?**

857 A: Adjustment #2 requires that any carrier not charging the affordable rate of \$20.39 per
858 month needs to impute the difference between the affordable rate and its rate for basic local
859 residential service on the Schedule 1.01 form.

860 **Q: What does the third adjustment address?**

861 A: Adjustment #3 involves an adjustment to federal HCLS. HCLS should be adjusted to
862 reflect any known funding changes that will be received during 2016 based on 2014 data
863 submitted to NECA and USAC in 2015. This adjustment is to reflect as best as possible the
864 HCLS a carrier is expecting to receive in 2016.

865 **Q: And lastly, what is the fourth standard adjustment?**

866 A: Adjustment #4 addresses non-regulated adjustments that are to be made for any
867 non-regulated activities whose costs are on the regulated books of the carrier. Some carriers
868 have these costs on their books and others do not. So this adjustment requires carriers to
869 examine their books and remove any non-regulated or deregulated costs from their
870 calculations.

871 **Q: Are there other adjustments that carriers may make?**

872 A: Yes. Any carrier that makes an adjustment to best reflect its operational costs in 2016 will
873 support those adjustments. There are two types of other adjustments the Commission may
874 expect to see: known and measurable changes expected in 2016, and S-Corp calculations.

875 **Q: Please describe in general terms the known and measurable change adjustment**
876 **certain carriers are including in their Schedule 1.01 submissions.**

877 A: Many carriers know, based on 2016 planning and activity, that their 2015 data are
878 incomplete. An example is for carriers that experienced large infrastructure investments in
879 2016, or a carrier that is currently working on a large infrastructure project replacing older
880 facilities. In these instances, the carrier knows its costs and would include such costs in its
881 Schedule 1.01 form as a known and measurable adjustment.

Q: Please explain the S-Corp calculations used by the S-Corp carriers.

A: During the latest Interim IUSF proceeding, S-Corp carriers' income taxes were excluded from their Schedule 1.01 forms by order of the Commission. The Commission explained that at the time it wasn't convinced that the federal treatment allowed for specialized S-Corp treatment and, until there was some clear change from the FCC, it was bound by contrary Commission precedent. The Commission noted in the ordering paragraph of its Interim Order that the long term IUSF should be "consistent with FCC policies and rules applicable on an interstate level to Illinois ILECs potentially eligible for IUSF support pursuant to Section 13-301(1)(d) of the Act."

Subsequent to the Commission's decision on this matter in the Interim IUSF proceeding, both the FCC and NECA clarified the federal position. Specifically, NECA's Reporting Guideline 3.1 addresses Subchapter S Corporations and was revised December 2014. It states:

According to the FCC, regulators generally permit recovery of taxes imposed on a utility's regulated operations regardless of ownership form. The FCC has clarified that Subchapter S corporations are allowed to include actual shareholder income tax liability in their revenue requirement and in their high-cost submissions." (See IITA Exhibit 1.13 - NECA Reporting Guideline 3.1)

The guideline provides specific guidance regarding how consolidated taxes are reported and how deferred taxes are treated in the federal jurisdiction.

Furthermore, in a letter to USAC's CEO, the Deputy Chief of the Wireline Competition Bureau explained that "there is no basis for ignoring the diversity of corporate ownership forms while making high-cost support determinations." (See IITA Exhibit 1.14 – FCC Letter to USAC (2014), page 4) Accordingly the FCC clarified in 2014 that "income taxes

attributable to corporation shareholders as a result of their ownership of the corporation's equity are includable in a carrier's revenue requirement and therefore recoverable through high-cost support." (*Id.*, page 5) Such treatment is not only consistent with how FERC addresses this issue for public utilities under their supervision but it also reduces the overall tax liability some S-Corp carriers would have if they were to move to a different organizational structure.

Based on this expert guidance in the federal jurisdiction and on the fact that the IUSF burden is lessened by allowing the diversity of corporate ownership, IITA recommends that the Commission revise its prior treatment and allow S-Corp carriers to include their actual shareholder income tax liability in their revenue requirement calculation. With the IITA's support, the S-Corp carriers in this proceeding have undertaken this calculation in their Schedule 1.01 forms.

Results

Q: Based on the Schedule 1.01 forms received by IITA, what is the total rate-of-return amount requested by participating carriers?

A: IITA Exhibit 1.15 shows the total Schedule 1.01 amounts for all participating carriers. The total amount of Long-Term IUSF support reported by the Schedule 1.01 forms is \$29,946,669 annually.

Q: Please describe IITA Exhibit 1.15.

A: IITA Exhibit 1.15 consists of 13 columns and a row for each carrier. Similar to IITA Exhibit 1.09 (Proprietary), I have also listed small incumbent rate-of-return carriers that are

927 not IITA members. These data report the Schedule 1.01 form submissions IITA received for
928 2015.

929 **Q: Do columns A and B identify each carrier?**

930 A: Yes. The SAC and carrier name are listed. These data are similar to IITA Exhibit 1.09
931 (Proprietary).

932 **Q: Please identify what information is reported in column F.**

933 A: Column F reports the taxable status of each carrier: taxable or cooperative. These data are
934 used in determining the after tax cost of capital.

935 **Q: I notice that columns C, D, and E are blank in this exhibit. Should there be any data**
936 **in these columns?**

937 A: Columns C, D, and E contained control data I used in collecting the information, such as
938 by whom and when the data were provided to IITA. They do not impact and are not
939 relevant to what I am now presenting through Exhibit 1.15, which summarizes and reports
940 the Schedule 1.01 form data.

941 **Q: Column G, H and I appear to be used to calculate the 2015 Target NOI that appears**
942 **on Schedule 1.01 Form line 25 of IITA Exhibit 1.11. Is this correct?**

943 A: Yes. IITA Exhibit 1.15 is a summary of the data reported on Schedule 1.01 forms. Columns
944 G, H, I, as well as columns J, K, L and M correspond to Schedule 1.01 form lines. Column
945 M reports the 2015 rate-of-return funding deficiency including taxes that corresponds to
946 Schedule 1.01 form Line 28.

Q: Does IITA propose that the requesting carriers receive the amount listed in column M of Exhibit 1.15?

A: No. This amount of approximately \$29.9M exceeds the annual Stipulation limit of \$25.5M. Each carrier's funding deficiency needs to be reduced by a control factor to ensure that distributions do not exceed the Stipulation limit.

Q: How is this control factor calculated?

A: The reduction factor is proportional to the amounts. The calculation is to divide the Stipulation limit by the 2015 Funding Deficiency ($\$25,500,000 / \$29,946,669$). The reduction factor equals 0.851514.

Q: Is the use of an explicit control factor an update to the rate-of-return second step in the Stipulated methodology?

A: Yes. The use of an explicit control factor is new to the Long-Term IUSF. The Stipulating parties agreed to use an explicit control factor to limit the overall size of the Long-Term IUSF to \$25.5M plus administrative expenses. The proportional adjustment of carriers' Schedule 1.01 reported deficiency amounts is administratively efficient because it is a simple calculation.

Q: Have you calculated the requested support amount for each ILEC participating in the Long-Term IUSF?

A: Yes. IITA Exhibit 1.16 calculates the Stipulated 2015 Funding Deficiency. This amount would be the annual amount received by each carrier from the Long-Term IUSF. The overall amount equals \$25.5M annually and does not include administrative expenses.

VII. Assessment and Impact on IUSF Surcharge

Q: Do you know the current IUSF surcharge that is applied to intrastate end-user revenue?

A: Yes. The current surcharge applicable to revenues of the contributing companies within the state is 1.0941%. On a residential bill of \$20.39 this would amount to 22 cents per month.

Q: Do you have an estimate of what the surcharge would be if the Stipulation was approved for implementation by the Commission?

A: The current disbursements amount to \$18,397,599 (not including administrative expenses) and the proposed Long-Term IUSF disbursements amount to \$25,500,000 (not including administrative expenses). This represents a 38.61 percent increase in disbursements. I estimate, all else being equal, that the end-user surcharge on a \$20.39 residential rate would increase to approximately 30 cents per month.

Q: Is your testimony that this increased surcharge is in the public interest?

A: Yes. The intent of the Illinois Legislature was to establish the IUSF if certain conditions were met. The IUSF is in the public interest because it fulfills the goals and requirements of the Legislature. All the statutory conditions are met and IUSF disbursements will enable rate-of-return carriers to maintain and advance the delivery of the services supported by the state.

VIII. Funding Mechanism and Administration

Q: What is your understanding of the statutory requirements regarding the funding mechanism?

A: I understand that the statute requires that the funding for the IUSF be recovered from all interexchange carriers and local exchange carriers certificated by the Commission in a competitively neutral manner.

Q: Does the Stipulation propose any change in the funding mechanism from that currently in place for the existing IUSF?

A: No. The Stipulation supports the position that the funding mechanism and the funding administrator should remain unchanged.

Q: Does the Stipulation mandate that carriers meet an eligibility requirement regarding their basic affordable rate?

A: Yes. If a carrier isn't charging the basic affordable rate as described in paragraph 17 of the Stipulation, then the carrier is not eligible for IUSF distribution. If this were to occur, the carrier would be ineligible for distributions on a monthly basis until the requirement is satisfied. The IUSF administrator would confirm that this requirement is met before disbursing IUSF support.

IX. Summary and Conclusion

Q: Please provide a summary of your testimony.

A: The Stipulation guides the Commission through a two-step process to develop a Long-Term IUSF support program. I have examined the two steps in detail and have provided the

1007 information sufficient for the Commission to adopt the Stipulation. The details provided
1008 herein examine the complex issues that arise in applying the requirements of the statute to
1009 the economic realities facing the participating carriers. I recommend the Commission
1010 determine that these facts are convincing and support the public interest in providing a
1011 Long-Term IUSF to the participating carriers.

1012 **Q: What is your recommendation to this Commission?**

1013 A: I recommend the Commission approve the IITA and AT&T Stipulation in its entirety and
1014 direct the IUSF Administrator to disburse Long-Term IUSF with an effective date of either
1015 the effective date of the Commission's order adopting these provisions or January 1, 2017,
1016 whichever is earlier.

1017 **Q: Does this conclude your Pre-filed Direct Testimony?**

1018 A: Yes.